

DIPHTHERIA CURE.

Anti-toxine Reduces the Mortality by Nearly Half.

Of particular interest at this time is a report made to Surgeon General Wyman by Dr. J. J. Kinyoun, the Marine hospital surgeon who, at the invitation of Prof. Roux, investigated the methods employed at the Pasteur institute, Paris, in the preparation of the new cure for diphtheria. Dr. Kinyoun says that after spending a month at the institute he has seen sufficient to enable him to form an intelligent estimate of the value of the discovery. There is, he says, still more to be said in its favor than was claimed for it by Prof. Roux in his paper on the subject before the international congress of hygiene and demography, held at Buda-Pesth in September. The report gives in detail the steps necessary in the preparation of the serum anti-toxine, which include, first, the preparation of the toxins of diphtheria; second, the immunization of animals; third, preservation and conservation of the serum. The manner of producing immunity in an animal, the report says, may be performed in one of two ways—by injection of the toxine or by inoculations of the bacilli. The former has been found to be the best, and at present is the only one in use. In the experiments of Prof. Roux and Dr. Martin, animals of all kinds were used, but now they use the horse, as it is found to be the most satisfactory. It stands the process of immunization better and gives a serum stronger than any other large animals in the same length of time, besides furnishing a larger amount of serum.

Of the whole number of cases which came under Dr. Kinyoun's observation (eighty-two) three died, about 4 per cent. The statistics show that there has been a gradual diminution of mortality since last May. The report continuing says:

The efficacy of the serum is better shown in the tracheotomies than in all others. The mortality under the usual conditions has been, from 1889 to 1894, something frightful to contemplate; fully 85 per cent. of the little patients have succumbed. Since the commencement of the serum treatment the death rate has been lowered to less than 47 per cent. and the cases upon which tracheotomy must be performed are fewer and fewer. Diphtheritic paralysis is rare, pneumonias are less frequent, and although albuminaria exists in nearly every case of several days' duration, fatal cases of nephritis are gradually becoming less frequent. It is now possible to immunize the re-agents to the disease. Unfortunately the immunity is not of long duration. The longest time in which it is thought to be protective is six weeks, one injection being sufficient. The future possibilities in this condition can not be overestimated, as we have in the serum the almost absolute preventive of epidemics of diphtheria.

Essay Competition.

On Friday afternoon, December, 7th the students of the normal school wrote essays on electricity. The essays were marked and given to the principal to decide which one possessed the most merit. The decision has been made and the honor was given to Master Eugene Warren, of this city. Following is the essay:

ELECTRICITY.

Before entering upon the consideration of electricity, its properties and practical application, this question naturally presents itself: What is electricity? This is a question the depths of which the electricians of the world have not been able to fathom. The best and in fact the only definition which has thus far been presented is, "Electricity is a condition which exists, when the molecules of a body are in certain positions." Its passage from one body to another is called an electrical current. Although it is true that the use of electricity was partly known to the ancients, it was not extensively known or applied until late in the present century, and even yet little is known of the science, although considerable is known of its appliance.

Among the great uses to which electricity has been put is its use in electric railroads. These are of two kinds, one in which a storage battery is used. This is founded upon the storage power which decomposed vermilion has for electricity, and the other the trolley car, in which the electricity is supplied by a wire, which runs along above or below the car.

To Germany belongs the honor of the first electric railroad. In 1879, Werner Siemens, of Berlin, had on exhibition a car running twenty miles an hour. The first electric railroad in the United States was exhibited at New Orleans, in 1885. Unsuccessful attempts were made by Thomas Davenport in 1835, and Prof. Page in 1851. Among the discoveries which are invaluable to the world—for without them electricity could never have been applied as the great moving power which it now is—was the discovery of an electric motor, by Abbe Salva-terre dal Negro, professor of the university of Padua, in 1830, and the discovery of the relation of the number of coils of wire around the magnet, by Prof. Henry, America's pioneer electrician.

The next application of electricity which attracts our attention is electricity used for lighting purposes. The first electric light was produced by Von Guericke, but Robert Boyle conceived the idea of an electric light before this. Boze, of Wittenberg, made the startling assertion to the world that he gave light, and had only to become electrified to become a perfect light. In 1843-4-5, Sir Humphrey Davy and Foucauld discovered the arc light, but to America

belongs the distinction of perfecting it, for in 1845 J. W. Starr conceived the idea of an incandescent light, which was perfected by Thomas A. Edison.

The next employment of electricity of which we will speak, is considered by many to be its greatest use. It is the subject of telephones, telegraphs and ocean cables. After an unsuccessful attempt by Prof. Reis, of Germany, in 1860, Prof. Graham Bell made a discovery which made the telephone possible, and in 1877 it was perfected. Prof. S. F. B. Morse discovered the telegraph and obtained an appropriation from congress to build a line from Washington to Baltimore, which, at first, did not pay expenses, but has proved an invaluable discovery, and which probably yields greater profits to its owners than any other corporation in the United States. Next comes the story of the cable, which is one of the most interesting in the history of electricity. In 1854 Cyrus W. Field, of New York, obtained from the government of Newfoundland the exclusive right, for fifty years, to lay an Atlantic cable. After three years of hard work it was completed from Cape Breton to Newfoundland. Then followed a chapter of accidents which is almost unparalleled in the history of any inventor's life. After being laid 380 miles to sea it broke, but in 1858 it was completed, but remained in working order only two weeks.

But Mr. Field was not daunted, and, by his patience, energy and perseverance, finally triumphed over Old Ocean, and on July 27, 1866, the continents were connected by a cable, and the greatest work of America's electricians was completed.

So ever conquer science!

Stant. Brannin killed a bear out on the Sapello a few days ago.

City, county and territorial taxes become delinquent on the first of next month.

The Fidelity building and loan association books which have been in Denver for some time have been returned to this city.

The ninth annual meeting of the Educational Association of New Mexico will be held at Albuquerque on Thursday of next week.

Colds seem to be in fashion now. The damp weather of the past two weeks has had its effect on most of the residents of this part of the county.

Died, in this city on Monday, December 17, 1894, Charlotte, daughter of Louis and Augusta Abraham, aged 17 months and 25 days. The funeral took place at 3 o'clock on Monday afternoon from the family residence. The grief stricken parents have the sympathy of the community in their bereavement.